

## **REMARKS**

### **I. Status of Claims and Amendment**

Applicants acknowledge the withdrawal of finality and the entry of Applicants' May 21, 2004, submission. Claims 1-186 are pending in this application. Claims 10-12, 20-28, and 60-186 have been withdrawn from consideration by the Examiner. Claims 1-9, 13-19, and 29-59 are under consideration.

The specification on page 10 has been amended to correct a typographical error. The paragraph that begins at line 3 describes compounds comprising at least two quaternary ammonium groups. Given the structure of this and surrounding paragraphs, Applicants submit that it is clear to one of skill in the art that the concluding sentence of the paragraph erroneously refers to examples of "the at least one film forming agent." Applicants submit that it is also clear from the textual context that the appropriate correction is examples of "the at least one compound comprising at least two quaternary ammonium groups." Since both the error and its correction are clear to one of skill in the art, particularly given the reference to pages 1703 to 1706 of the CTFA International Cosmetic Ingredient Dictionary, this amendment does not add any new matter.

### **II. Nonstatutory Double Patenting Rejections**

Claims 1-9, 13-19, and 29-59 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-100 of U.S. Application No. 09/820,812. (Office Action, page 2.)

Claims 1-9, 13-19, and 29-59 are also provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 57-166 of U.S. Application No. 09/820,856. (Office Action, page 3.)

Claims 1-9, 13-19, and 29-59 continue to be provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-85, 152, and 153 of U.S. Application No. 09/821,480. (Office Action, page 4.)

Claims 1-9, 13-19, and 29-59 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-7, 10-17, 27-65, 75-105, 108-115, and 125-145 of U.S. Patent No. 6,486,105. (Office Action, page 4.)

Applicants note that U.S. Application No. 09/820,856 recently issued as U.S. Patent No. 6,800,302.

Applicants respectfully traverse each of these rejections. In particular, genus claims in a copending application or patent provide a basis for an obviousness-type double patenting rejection only if the Examiner can show why the claimed invention would be obviousness in view of the conflicting claims in the same sense that the claimed invention would be obvious under 35 U.S.C. § 103(a). See M.P.E.P. § 804(II)(B)(1).

Nevertheless, until such time as allowable subject matter is indicated in this application, Applicants respectfully request that these rejection be held in abeyance. Upon an indication of allowable subject matter, Applicants will provide the appropriate terminal disclaimer(s) with respect to any allowable conflicting claims.

### III. Rejection under 35 U.S.C. §103

#### A. *Karlen* in view of *Bertho*

Claims 1-9, 13-19, and 29-59 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,004,545 ("*Karlen*") in view of U.S. Patent No. 5,688,930 ("*Bertho*"). (Office Action, page 5.) Applicants respectfully traverse this rejection.

The Office cites *Karlen* as teaching a hair cleaning composition comprising a vinyl/silicone copolymer and a surfactant. (Office Action, page 5.) The Office points out that *Karlen* at column 7, lines 45-67, teaches that film-forming polymers such as Polymer JR, may be added to the composition. *Id.* The Office notes that *Karlen* also teaches at column 4, lines 23-38, and in the Examples, that one option for the surfactant is alkyl glucosides. *Id.* The Office acknowledges that *Karlen* does not teach the claimed pentoses. *Id.* The Office nevertheless concludes that it would have been obvious to the ordinary artisan to substitute an alkyl pentoside for the alky glucoside of *Karlen*, because *Bertho* teaches the application of a mixture that includes pentosides as a surfactant for hair care products. *Id.* The Office suggests that the ordinary artisan would have been motivated to make such a substitution because *Bertho* teaches at column 6, lines 33-35, that its product has enhanced foaming, emulsifying, and detergent power, and teaches at column 1, lines 34-45, that its product is economically advantageous because it is cheap. *Id.* at 6.

A prima facie case of obviousness must meet several essential criteria, including that the prior art references must teach or suggest all of the claim limitations, and that there is some reason, suggestion, or motivation in the prior art to lead one of ordinary

skill in the art to combine the teachings of the references in the manner proposed by the Office. See *Pro-Mold and Tool Co. v. Great Lakes Plastics, Inc.*, 75 F.3d 1568, 1573 (Fed. Cir. 1996); M.P.E.P. § 2143. The suggestion or motivation must be found in the prior art, not in the Applicant's disclosure. *Id.* Furthermore, the suggestion to combine the prior art teachings must be clear and particular. *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999). Judged by this standard, Applicants respectfully submit the Office has not met its burden for establishing a prima facie case of obviousness.

The Federal Circuit has emphasized, for example in *In re Kotzab*, 217 F.3d 1365 (Fed. Cir. 2000), important precedent which goes against the Examiner's position. In *Kotzab*, the court reversed an obviousness rejection involving a technologically simple concept because there was no finding as to the principle or specific understanding within the knowledge of one of ordinary skill in the art to make the claimed invention. *In re Kotzab*, 217 F.3d at 1371. As pointed out in *Kotzab*, a rejection cannot be predicated on the mere identification of individual components of claimed limitations. *Id.* Even where obviousness is based on a single prior art reference teaching all of the individual elements of the claims, there must be a showing of a suggestion or motivation to modify the teachings of that reference. *Id.* Particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, *would have selected these components for combination in the manner claimed.* *Id.* (emphasis added).

The Office's proposed motivation focuses on the substitution of the alkyl pentoside mixture of *Bertho* for the alky glucoside of *Karlen*. However, the Office disregards the fact that *Karlen* lacks more than just a teaching of the alkyl pentoside. *Karlen's* invention is the combination of a particular type of vinyl/silicone copolymer and

any of the numerous surfactants taught in a list that extends from Col. 3, line 30 through Col. 5, line 58. The instant claims, in contrast, require at least one compound comprising at least two quaternary ammonium groups and at least one sugar chosen from C<sub>3</sub> to C<sub>5</sub> monosaccharides substituted with at least one C<sub>1</sub> to C<sub>22</sub> carbon chain. As acknowledged by the Office, *Karlen* does not teach surfactants that are pentoses. In addition, while *Karlen* does mention at Col. 7 that film-forming polymers may be included, and does list as one of many possibilities the Polymer JR relied upon by the Office, *Karlen* does not require the addition of any film-forming compound, let alone one that comprises at least two quaternary ammonium groups.

Thus while the composition of *Karlen* could possibly be modified to add a film-forming agent, *Karlen* provides no clear and particular reason for doing so. Neither has the Office pointed to any teaching in *Bertho* that would have motivated the ordinary artisan to have chosen to add to the composition of *Karlen* any film-forming compounds in general, let alone motivated the addition of not just a film-forming compound comprising at least two quaternary ammonium group as recited, but the elected derivatives of polysaccharide polymers comprising at least two quaternary ammonium groups, to the composition of *Karlen*. Substantial picking and choosing from among numerous disclosed optional ingredients would be required in order to arrive at a compound that included a film-forming agent within the scope of the claims. Even, assuming *in arguendo* that one would choose a film-forming agent and that it would be one within the scope of the claims, the resulting composition would still lack the elected alkyl pentoside.

Further, although *Bertho* indicates that it provides a replacement for alkyl glucosides that is cheaper, nothing in *Karlen* suggests the desirability of selecting an alkyl polyglucoside for inclusion in the composition of *Karlen* from among the numerous other surfactants taught. Absent motivation to first select a surfactant that is an alkyl polyglucoside from among the numerous surfactants taught by *Karlen*, there can be no basis for substituting the alkyl pentosides taught by *Bertho* into the composition of *Karlen*.

The Office has failed to show why the ordinary artisan at the time the invention was made would have been motivated to select particular components of the composition of *Karlen*, and then, having made this selection, to substitute the compound of *Bertho* in the composition. Accordingly, the Office has not established a prima facie case. For at least the foregoing reasons, Applicants respectfully request the withdrawal of this rejection.

B. *Niemiec* in view of *Bertho*

Claims 1-9, 13-19, and 29-59 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,495,498 ("*Niemiec*") in view of U.S. Patent No. 5,688,930 ("*Bertho*"). (Office Action, page 6.) Applicants respectfully traverse this rejection.

The Office relies on *Niemiec* as teaching detergent and conditioning compositions comprising cationic conditioning agents, including cellulose derivatives such as Polymer JR-400 and Polyquaternium-10, in combination with detergents. (Office Action, page 6.) The Office points to column 13, lines 1-9, as teaching that

these polymers are suitable for forming a continuous coating on the hair. *Id.* The Office characterizes *Niemiec* as “teach[ing] Polyquaternium-10 as essential in the composition for conditioning and film-forming effect.” *Id.* The Office acknowledges that *Niemiec* does not teach incorporating the claimed monosaccharides as surfactants. *Id.* The Office asserts, however, that in view of the teaching of alkyl pentosides surfactants by *Bertho*, it would have been obvious to add alkyl pentosides into the hair care composition of *Niemiec* containing Polyquaternium-10 hair conditioner. *Id.* at 6-7. According to the Office, the ordinary artisan would have been motivated to do so because *Bertho* teaches its product is cheap and has enhanced foaming, emulsifying, and detergent power, and because “*Niemiec* is directed to a hair shampoo and conditioning composition containing detergent surfactants as well as conditioners.” *Id.* at 7. The Office suggests that “one of ordinary skill in the art would have expected to improve the emulsifying power of the composition of *Niemiec* with a cheaper material of *Bertho*.” *Id.* In the present case, the Examiner has not provided any motivation, suggestion or teaching of the desirability of making the specific combination that was made by Applicants.

*Niemiec* teaches cleansing compositions comprising a water soluble silicone agent, a cationic conditioning agent, and at least one detergent. Col. 2, lines 25-32. *Niemiec* does teach at Col. 6, lines 2-8, that the cationic conditioning agent can be cationic cellulose derivatives such Polyquaternium-10, and at Col. 13, lines 1-9, that Polyquaternium-10 is a film-forming polymers. Contrary to the Office’s characterization, however, Polyquaternium-10 is but one of many possible cationic conditioning agents that *Niemiec* teaches can be used. There does not, therefore, appear to be any

particular teaching in *Niemiec* that Polyquaternium is “essential” in the composition. It is only armed with Applicants’ disclosure that the Office could in hindsight have appreciated the use of compounds comprising at least two quaternary ammonium groups. Certainly the Office has pointed to nothing in *Niemiec* to suggest the desirability of selecting compounds comprising at least two quaternary ammonium groups. Similarly, although *Niemiec* does teach that the inclusion of a detergent, i.e., a surfactant, in the composition, *Niemiec*’s list of suitable detergents at column 6 to column 7 is extensive. In addition to failing to teach alkyl pentosides, *Niemiec* also fails to provide any reason why the ordinary artisan would have found it desirable to select an alkyl glucoside as the surfactant.

Once again, substantial picking and choosing from among numerous disclosed optional ingredients would be required in order to arrive at a variation of the claimed invention that still lacks the elected alkyl pentoside. As with the Office’s rejection of the claims as unpatentable over *Karlen* in view of *Bertho*, the Office has again failed to point to clear and particular reasons why the ordinary artisan would have made the initial selection of components in the teaching of the primary reference. Further, for the reasons discussed *supra* with respect to *Karlen* in view of *Bertho*, there must first be some motivation to select a surfactant that is an alkyl polyglucoside from among the numerous surfactants taught before there can be any basis for substituting the alkyl pentosides taught by *Bertho*.

The Office has failed to show why the ordinary artisan at the time the invention was made would have been motivated to select particular components of the composition of *Niemiec*, and then, having made this selection, to substitute the



compound of *Bertho* in the composition. Accordingly, the Office has not established a prima facie case and Applicants respectfully request the withdrawal of this rejection.

**IV. Conclusion**

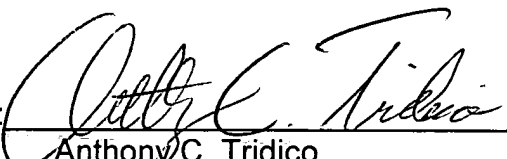
In view of the foregoing remarks, Applicants respectfully request the reconsideration and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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